

## STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0109789; AI 41882; PER20090002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality  
Office of Environmental Services  
P. O. Box 4313  
Baton Rouge, Louisiana 70821-4313

- I.     **THE APPLICANT IS:**           Eagle Water, Inc  
  Espanita Forest Oxidation Pond  
  P.O. Box 296  
  Keithville, La 71047
  
- II.    **PREPARED BY:**               Rachel Davis
  
- DATE PREPARED:**           December 1, 2009
  
- III.   **PERMIT ACTION:**           reissue LPDES permit LA0109789, AI 41882; PER20090002  
  
   LPDES application received: November 3, 2009  
  
   EPA has not retained enforcement authority.  
  
   LPDES permit issued: April 1, 2004  
   LPDES permit expires: March 30, 2010

### IV.    **FACILITY INFORMATION:**

- A.     The application is for the discharge of treated sanitary wastewater from a privately owned treatment works serving the Espanita Forest Subdivision and a strip mall.
  
- B.     The permit application does not indicate the receipt of industrial wastewater.
  
- C.     The facility is located on Mark Street in Red Chute, Bossier Parish.
  
- D.     The treatment facility consists of a 5-acre oxidation pond with disinfection by chlorination.
  
- E.     Outfall 001  
  
           Discharge Location:   Latitude 32° 33' 01" North  
   Longitude 93° 37' 06" West  
  
           Description:           treated sanitary wastewater  
  
           Design Capacity:      0.076 MGD  
  
           Type of Flow Measurement which the facility is currently using:  
                                       Bucket and Stop Watch

### V.     **RECEIVING WATERS:**

The discharge is into a Red Chute Bayou segment 100402 of the Red River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

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The designated uses and degree of support for Segment 100402 of the Red River Basin are as indicated in the table below<sup>1/</sup>:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not supporting	Full	Not Supporting	N/A	N/A	N/A	Full

<sup>1/</sup>The designated uses and degree of support for Segment 100402 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

#### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100402 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

#### VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

#### VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

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For additional information, contact:

Ms. Rachel Davis  
 Water Permits Division  
 Department of Environmental Quality  
 Office of Environmental Services  
 P. O. Box 4313  
 Baton Rouge, Louisiana 70821-4313

**IX. PROPOSED PERMIT LIMITS:**

Subsegment 100402, Red Chute Bayou- From Cypress Bayou junction to Flat River, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

**Final Effluent Limits:**

Final limits shall become effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
CBOD <sub>5</sub> May-October November-April		20 mg/l 30 mg/l	30 mg/l 45 mg/l	Limits are set in accordance with a wasteload allocation for Red Chute Bayou near Bossier City and the previous permit.
TSS*		90 mg/l	135 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen May-October November-April		10 mg/l 15 mg/l	20 mg/l 30 mg/l	Limits are set in accordance with a wasteload allocation for Red Chute Bayou near Bossier City and the previous permit.
Dissolved Oxygen**		---	2 mg/l	Limits are set in accordance with a wasteload allocation for Red Chute Bayou near Bossier City and the previous permit.

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Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Daily Max.	Basis
Oil and Grease		---	15 mg/l	Because there is food service at the facility an oil and grease limitation is needed

\*The TSS limitations have been changed from the previous limitation of 15/ 23 mg/l to 90/135 mg/l because the treatment method is an oxidation pond.

\*\*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

**Other Effluent Limitations:****1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

**2) pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C)

**3) Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

**X. PREVIOUS PERMITS:**

LPDES Permit No. LA0109789: Issued: April 1, 2005  
Expired: March 31, 2010

Effluent Characteristic	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	1/month	Measure
CBOD <sub>5</sub>				
May-October	20 mg/l	30 mg/l	1/month	Grab
November-April	30 mg/l	45 mg/l	1/month	Grab
TSS	15 mg/l	23 mg/l	1/month	Grab
Ammonia-Nitrogen				
May-October	10 mg/l	20 mg/l	1/month	Grab
November-April	15 mg/l	30 mg/l	1/month	Grab

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Dissolved Oxygen	---	2 mg/l	1/month	Grab
Fecal Coliform Colonies	200	400	1/month	Grab

**XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:****A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **June 2007** and ending **June 2009** for this facility.

Date: December 11, 2007

Findings and/or Violations:

1. The WWTP is an oxidation pond
2. DMR's revealed chronic TSS permit violations
3. Dissolved Oxygen readings are not reported on DMRs
4. Permittee failed to conduct effluent samples on 12/06, 1/07, and 2/07
5. The site was unmanned

Date: July 15, 2008

Findings and/or Violations:

1. Initial investigation revealed an unauthorized discharge of sewage from the facility
2. Duration of overflow was 24 hrs
3. Sludge removed from primary oxidation pond during system upgrade to the newly constructed cell
4. Pond levees have been upgraded and are adequate
5. Sludge still present in new cell
6. No discharge at this time, however dried sludge was visible between levee and Red Chute Bayou

**B) Compliance and/or Administrative Orders**

A review of the files indicates that no compliance orders have been issued against the facility in the past two years.

**C) DMR Review**

A review of the discharge monitoring reports for the period beginning **June 2007** through **June 2009** has revealed the following violations:

Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
June 2007	TSS	001	15 mg/l	29 mg/l
	TSS		23 mg/l	29 mg/l
July 2007	TSS	001	15 mg/l	26.4 mg/l
	TSS		23 mg/l	26.4 mg/l
October 2007	TSS	001	15 mg/l	34.8 mg/l
	TSS		23 mg/l	34.8 mg/l
	fecal		200	408
November 2007	TSS	001	15 mg/l	41.3 mg/l
	TSS		23 mg/l	41.3 mg/l
December 2007	TSS	001	15 mg/l	46.9 mg/l
	TSS		23 mg/l	46.9 mg/l
January 2008	TSS	001	15 mg/l	32.7 mg/l

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	TSS		23 mg/l	32.7 mg/l
February 2008	TSS	001	15 mg/l	43 mg/l
	TSS		23 mg/l	43 mg/l
March 2008	TSS	001	15 mg/l	25.6 mg/l
	TSS		23 mg/l	25.6 mg/l
April 2008	Fecal	001	200	568
	Fecal		400	568
May 2008	TSS	001	15 mg/l	62 mg/l
	TSS		23 mg/l	62 mg/l
October 2008	TSS	001	15 mg/l	44.7 mg/l
	TSS		23 mg/l	44.7 mg/l
November 2008	CBOD	001	30 mg/l	38 mg/l
	TSS		15 mg/l	49 mg/l
	TSS		23 mg/l	49 mg/l
December 2008	CBOD	001	30 mg/l	36.4 mg/l
	TSS		15 mg/l	23.2 mg/l
	Fecal		200	2000
	Fecal		400	2000
January 2009	CBOD	001	30 mg/l	44.6 mg/l
	TSS		15 mg/l	58 mg/l
	TSS		23 mg/l	58 mg/l
April 2009	CBOD	001	30 mg/l	39.2 mg/l
May 2009	CBOD	001	20 mg/l	29.9 mg/l
	TSS		15 mg/l	49.1 mg/l
	TSS		23 mg/l	49.1 mg/l
	Fecal		200	372
June 2009	CBOD	001	20 mg/l	30. mg/l
	TSS		15 mg/l	64 mg/l
	TSS		23 mg/l	64 mg/l

**XII. ADDITIONAL INFORMATION:**

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or

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- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.02 and 0.1 MGD.

<u>Effluent Characteristics</u>	<u>Monitoring Requirements</u>	
	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	1/week	Measure
CBOD <sub>5</sub>	1/month	Grab
Total Suspended Solids	1/month	Grab
Ammonia-Nitrogen	1/month	Grab
Dissolved Oxygen	1/month	Grab
Oil and Grease	1/month	Grab
Fecal Coliform Bacteria	1/month	Grab
pH	1/month	Grab

**XIII. TENTATIVE DETERMINATION:**

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

**XIV. REFERENCES:**

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Eagle Water, Inc, Espanita Forest Oxidation Pond, November 3, 2009.